

ABSTRACT

The present invention relates to subterranean drilling operations, and more particularly, to drilling fluids that may be used to drill a well bore in a subterranean formation that may demonstrate improved shale inhibition and methods of using such drilling fluids in subterranean formations. One embodiment of the methods of the present invention provides a method of drilling a well bore in a subterranean formation comprising providing a drilling fluid comprising an aqueous-based fluid and a shale inhibiting component comprising a nanoparticle source; and placing the drilling fluid in the well bore in the subterranean formation. Another embodiment of the present invention provides a method of flocculation comprising providing a fluid comprising suspended particles, and adding a shale inhibiting component comprising a nanoparticle source to the fluid comprising suspended particles to form flocculated particles.